

**CLAIMS**

What is claimed is:

1. A method of treating a poxvirus infection, the method comprising administering to an individual an effective amount of IFN- $\alpha$ .
2. The method of claim 1, wherein the IFN- $\alpha$  is administered concurrently with a vaccinia virus vaccine.
3. The method of claim 1, wherein the individual has been vaccinated with vaccinia virus.
4. The method of claim 3, wherein the IFN- $\alpha$  is administered from 1 to 30 days after vaccination.
5. The method of claim 1, wherein IFN- $\alpha$  is administered from 1 day to 1 year before administration of a vaccinia virus vaccine.
6. The method of claim 1, further comprising administering a vaccinia virus vaccine.
7. The method of claim 1, wherein the individual has been exposed to smallpox virus, and the IFN- $\alpha$  is administered within 24 hours of exposure to smallpox virus.
8. The method of claim 1, wherein the individual has been exposed to smallpox virus, and the IFN- $\alpha$  is administered within 48 hours of exposure to smallpox virus.
9. The method of claim 1, wherein the individual has been exposed to smallpox virus, and the IFN- $\alpha$  is administered 72 hours to 35 days after exposure to smallpox virus.
10. A method of treating a poxvirus infection, the method comprising administering to an individual an effective amount of IFN- $\gamma$ .

11. The method of claim 10, wherein the IFN-  $\gamma$  is administered concurrently with a vaccinia virus vaccine.
12. The method of claim 10, wherein the individual has been vaccinated with vaccinia virus.
13. The method of claim 12, wherein the IFN- $\gamma$  is administered from 1 to 30 days after vaccination.
14. The method of claim 10, wherein IFN- $\gamma$  is administered from 1 day to 1 year before administration of a vaccinia virus vaccine.
15. The method of claim 10, further comprising administering a vaccinia virus vaccine.
16. The method of claim 10, wherein the individual has been exposed to smallpox virus, and the IFN- $\gamma$  is administered within 24 hours of exposure to smallpox virus.
17. The method of claim 10, wherein the individual has been exposed to smallpox virus, and the IFN-  $\gamma$  is administered within 48 hours of exposure to smallpox virus.
18. The method of claim 10, wherein the individual has been exposed to smallpox virus, and the IFN-  $\gamma$  is administered 72 hours to 35 days after exposure to smallpox virus.
19. A method of treating a poxvirus infection, the method comprising administering to an individual effective amounts of IFN- $\gamma$  and IFN- $\alpha$ .
20. The method of claim 19, wherein the IFN- $\gamma$  and IFN- $\alpha$  are administered concurrently with a vaccinia virus vaccine.
21. The method of claim 19, wherein the individual has been vaccinated with vaccinia virus.

22. The method of claim 21, wherein the IFN- $\gamma$  and IFN- $\alpha$  are administered from 1 to 30 days after vaccination.
23. The method of claim 19, wherein the IFN- $\gamma$  and IFN- $\alpha$  are administered from 1 day to 1 year before administration of a vaccinia virus vaccine.
24. The method of claim 19, further comprising administering a vaccinia virus vaccine.
25. The method of claim 19, wherein the individual has been exposed to smallpox virus, and the IFN- $\gamma$  and IFN- $\alpha$  are administered within 24 hours of exposure to smallpox virus.
26. The method of claim 19, wherein the individual has been exposed to smallpox virus, and the IFN- $\gamma$  and IFN- $\alpha$  are administered within 48 hours of exposure to smallpox virus.
27. The method of claim 19, wherein the individual has been exposed to smallpox virus, and the IFN- $\gamma$  and IFN- $\alpha$  are administered 72 hours to 35 days after exposure to smallpox virus.
28. The method of any one of claims 1, 10, and 19, further comprising administering an effective amount of a nucleotide analog or a nucleoside analog.
29. The method of any one of claims 1-9, wherein the IFN- $\alpha$  is a consensus interferon.
30. The method of any one of claims 19-27, wherein the IFN- $\alpha$  is a consensus interferon.